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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,385	02/16/2000	Erik P. Staats	APPL-P2827	6463

7590
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03/29/2004

EXAMINER

WON, YOUNG N

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 03/29/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/505,385

Applicant(s)

STAATS, ERIK P.

Examiner

Young N Won

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-13 have been reexamined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 5-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Takayama (US 5991842 A).

As per claim 5, Takayama teaches a method for establishing transport routing information in an AV/C transaction data delivery system, comprising in combination: detecting a transport (see col.10, lines 9-13 & 57-59); creating a transport ID associated with said transport (implicit: see col.4, lines 26-29 and col.8, lines 50-54); notifying a

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transport layer of said transport ID (see col.4, lines 5-10 & 21-31); indexing said transport ID (see col.4, lines 51-57 and col.8, lines 31-34); associating said indexed transport ID with a device (see col.4, lines 7-10 & 28-29 and col.5, line 63 to col.6, line 3).

As per claim 6, Takayama teaches of further comprising associating said transport with a link device (see col.4, lines 3-4).

As per claim 7, Takayama teaches of further comprising creating a data record for each detected transport and storing the transport ID in association with said transport (see col.5, line 63 to col.6, line 3).

As per claim 8, Takayama teaches of further comprising notifying said transport layer of said data record (see col.4, lines 21-22).

As per claim 9, Takayama teaches a method for sending AV/C transaction data in an AV/C transaction data delivery system (see col.6, line 47), comprising in combination: receiving AV/C transaction data for transport (see col.6, lines 47-58 and col.9, lines 32-54); associating said AV/C transaction data with a transport ID (see col.5, line 63 to col.6, line 3 and col.8, lines 45-54); providing said AV/C transaction data and transport ID to a transport layer (see col.4, line 23-31); associating said transport ID with a transport controller bus ID (see col.4, lines 5-10 & 23-29); and providing said AV/C transaction data to a transport controller data record associated with said bus ID (see col.7, lines 46-50 & lines 52-62).

As per claim 10, Takayama teaches of further comprising executing appropriate routines to transport said AV/C transaction data over the specified transport (see Fig.11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (US 5991842 A) in view of Boucher (US 6226680 B1).

As per claim 1, Takayama teaches of an AV/C transaction data delivery system (see title), comprising in combination: a transport controllers (see Fig.7, #6 and col.7, lines 44-50); an AV/C transport layer in operative communication with said transport controllers (see Fig.2; Fig.7; col.3, lines 62-67; col.4, lines 5-10; and col.7, lines 5-7); and an AV/C protocol layer in operative communication with said AV/C transport layer (see Fig.2), said AV/C protocol layer including means for sending AV/C transaction data over more than one transport (see Fig.5; col.3, lines 9-13; and col.5, lines 36-51). Takayama does not explicitly teach of a plurality of transport controllers and of said AV/C protocol layer having a separate implementation from said A/V transport layer. It would have been obvious to a person of ordinary skill in the art at the time the invention

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was made to employ a plurality of transport controllers within the A/V transaction delivery system of Takayama because with any device comprising of more than one component, such implementation would increase performance (throughput) and in this case, be able to communicate with a greater number of nodes. Boucher teaches of AV/C protocol layer having a separate implementation from said A/V transport layer (see col.2, lines 35-54). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Boucher within the system of Takayama by implementing transport layer and protocol layer (see col.1, lines 60-63: network layer) differently within the AV/C transaction data delivery system because Boucher teaches of an OSI standard, known and employed in the art (see col.1, lines 31-40) and Takayama teaches of employing such a standard (see Fig.2), therefore, one of ordinary skill in the art would implement the layers according to the known standard for acceptance and ease of implementation.

As per claim 2, Takayama teaches of further comprising one or more transport instances associated with said at least one transport controller, wherein said transport controller includes means for indexing said transport instances (see col.7, line 51 to col.8, line 13).

As per claim 3, Takayama teaches of further comprising a transport instance catalog included within said transport layer, said catalog including means for receiving transport instance information from said at least one transport controller (see col.5, lines 36-51 and col.8, lines 31-36).

As per claim 4, Takayama teaches of further comprising a device-to-transport instance index included within said AV/C protocol layer, said device to-transport instance index including means for communicating transport instance information from and to said transport layer (see col.5, lines 36-51; col.9, lines 33-54; and col.12, lines 8-20).

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (US 5991842 A).

As per claim 11, Takayama teaches a method for receiving AV/C transaction data in an AV/C transaction data delivery system, comprising in combination: receiving AV/C transaction data from a plurality of transport controllers and associating said data with a link ID (see Fig.7 and col.5, line 63 to col.6, line 3); converting said link ID to a data record and a bus ID (see col.5, lines 36-51); providing said bus ID and said data to a transport layer (see col.4, line 23-31); associating said bus ID with a transport ID (see col.4, lines 23-31); and providing said transport layer ID and data to a protocol layer (see Fig.2; col.4, lines 1-22; col.7, lines 45-50). Although Takayama does not explicitly teach that the link ID is converted to a data record and bus ID, it is inherent that in order for one device to communicate with the other device, the identification of the connection must be converted or appended to the data, which entails the identification of the bus that is performing the communication. Takayama does not explicitly teach that there exists a plurality of transport controllers. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a plurality of

transport controllers within the A/V transaction delivery system method of Takayama because with any device comprising of more than one component, such implementation would increase performance (throughput) and in this case, be able to communicate with a greater number of nodes.

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (US 5991842 A) in view of Lawande et al. (US 6219697 B1).

As per claims 12 and 13, Takayama does not teach of further comprising searching by said transport ID for a matching previously sent transport ID and the command associated therewith or associating said data with a particular subunit device when said transport ID and a retrievable subunit ID match. Lawande teaches of further comprising searching by said transport ID for a matching previously sent transport ID and the command associated therewith, and associating said data with a particular subunit device when said transport ID and a retrievable subunit ID match (see col.18, lines 8-14 and col.18, line 63 to col.9, line 8). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Lawande within the system of Takayama by employing a searching mechanism of a previously sent transport ID by matching it with a transport ID, and command associated therewith within an AV/C transaction data delivery system because this would enable the system as a whole to save time and processing power by eliminating the need to run the switching operation in instances where a connection was lost or time elapsed between prior, same two devices communication.

Response to Arguments

6. Responses to the remarks regarding claim 5 is addressed below.

A. In response specifically to the element of "detecting a transport", it is implicit when a device (switch 12) is detected as taught by the reference since Takayama teaches that the system " realizes the functions" and can "perform communications suitable for each function" (see abstract). Furthermore, Takayama teaches that the detecting of the switch 12 is essentially the detection of a mode of the device, "i.e., whether the video/camera switch 12 is activated" (see col.10, lines 57-59) and that this initial step is to determine the protocol for the transport (see col.10, line 63 to col.11, line 39). Additional reference location to support the argument has been included in the rejection above.

B. In response specifically to the element of "creating a transport ID associated with said transport" a new reference location has been provided to further teach this limitation.

C. In response specifically to the element of "the notifying a transport layer of said transport ID", Takayama teaches of an IEEE 1212 regulation standard that describes of bus ID and node ID (see col.4, lines 21-31) and how they are added into headers of packets (see col.8, lines 50-54) for "discriminating" between busses and devices, respectively. Therefore, it is implicit that this identifying information are notified and employed by each passing layer and device to correctly and efficiently route and

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process the packet. Additional reference location to support the argument has been included in the rejection above.

D. In response specifically to the element of indexing said the transport ID, Takayama clearly teaches this limitation (see reference locations provided above). The arguments suggest patentability based on the reference not specifically pointing out the limitations, but these limitations are inherent and/or clearly suggested by Takayama. Additional reference location to support the argument has been included in the rejection above.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. The arguments merely and similarly state that the reference locations does not teach or suggest each element. There is insufficient argument in the Request For Reconsideration.

7. If the fundamental argument is a novel "Transport ID", then such novelty must be clearly recited in the claims. Clearly, a transport ID as supported by the written disclosure is a means for correlating "transmission with a previously sent command" in determining the device to forward to (page 17, line 16 to page 18, line 3). Takayama teaches of such an ID: "the next 6 bits are called a node ID which is used for the discrimination between equipments" (see col.4, lines 28-29) and further teaches "Each equipment has a unique ID so that all the equipments interconnected by 1394 serial

busses in one network can be identified... allows automatic recognition of an equipment and its connection state when it is connected by a cable to the network" (see col.3, lines 31-39). The written disclosure does not clearly define a Transport ID to teach away from Takayama's node ID.

8. Similarly in light of the response to arguments stated above, claims 1-4, 9, and 11, remain rejected. The claims must be amended to clearly define the novel functional elements of the invention.

Conclusion

9. Additional search was performed to site the element of a "Transport ID" (see the attached reference, Sitbo et al. (US 5568487 A) particularly col.6, lines 1-5), but the examiner found not need, since the definition of "Transport ID" as supported by the disclosure is clearly taught by Takayama.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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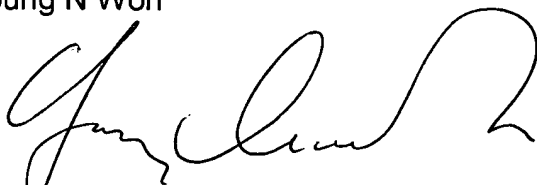
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 6AM-3PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Young N Won



March 23, 2004



HOSAIN ALAM
SUPERVISORY PATENT EXAMINER